

REMARKS

The Examiner is requested to approve the accompanying replacement drawings. The changes to the drawings are to replace reference numeral "47" with --77-- in Figure 1, and to show the external pressing device 49' in Figure 9.

The amendments set out above and the following remarks are believed responsive to the points raised by the Office Action dated May 17, 2004. In view of the amendments set out above and the following remarks, reconsideration is respectfully requested.

The Pending Claims

Claims 21-24 and 26-44 remain pending.

Claim 24 has been amended to describe the invention more clearly. In particular, claim 24 has been amended to replace "body" with --bodies-- in response to paragraph number 16 in the Office Action.

No new matter has been added, the basis for the amended claim language may be found within the original specification, claims and drawings.

The Office Action

For convenience, the following remarks will address the various objections and rejections in the same order they were raised in the Office Action.

The Office Action indicated the previously submitted drawing corrections and amendments to the specification were objected to in view of the reference to clamp 49a and bushing 49b.

In the proposed drawing corrections, Figure 9 is modified to show a pressing device supported external to the container (without showing clamp 49a and bushing 49b as proposed in the previously submitted drawing correction), and Figure 1 is modified to replace reference character "47" with --77--. The specification was similarly amended at page 5, second paragraph.

Withdrawal of the objections and approval of the drawing corrections and the amendments to the specification are requested.

Rejections under 35 USC § 103

Claims 21-23, 26, 28-29, 31, 35, and 37 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 3,294,241 to Sicard et al. (hereinafter referred to as

“Sicard et al.”) in view of U.S. Patent No. 5,271,838 to Rahimi et al. (hereinafter referred to as “Rahimi et al.”).

Claims 24 and 36 were rejected under 35 U.S.C. §103(a) as being unpatentable over Sicard et al. in view of Rahimi et al. as applied to claims 21 and 35, and further in view of U.S. Patent No. 5,549,824 to Trumpf et al. (hereinafter referred to as “Trumpf et al.”).

Claim 27 was rejected under 35 U.S.C. §103(a) as being unpatentable over Sicard et al. in view of Rahimi et al. as applied to claim 21, and further in view of U.S. Patent No. 2,654,440 to Robinson (hereinafter referred to as “Robinson”).

Claims 30 and 32-34 were rejected under 35 U.S.C. §103(a) as being unpatentable over Sicard et al. in view of Rahimi et al. as applied to claims 28 and 31, and further in view of WO 99/19042 to Diemer et al. (hereinafter referred to as “Diemer et al. ‘042”).

Claims 38 and 40-43 were rejected under 35 U.S.C. §103(a) as being unpatentable over Sicard et al. in view of Rahimi et al. as applied to claim 35, and further in view of WO 99/19041 to Diemer et al. (hereinafter referred to as Diemer et al. ‘041”).

Claim 44 was rejected under 35 U.S.C. §103(a) as being unpatentable over Sicard et al. in view of Rahimi et al. and further in view of Diemer et al. ‘041 as applied to claim 42, and further in view of U.S. Patent No. 2,692,686 to Fleck et al. (hereinafter referred to as “Fleck et al.”).

Claim 39 was rejected under 35 U.S.C. §103(a) as being unpatentable over Sicard et al. in view of Rahimi et al. and further in view of Diemer et al. ‘041 as applied to claim 38, and further in view of Trumpf et al.

Each of these rejections is separately and respectfully traversed.

As an initial point with respect to the rejection of the independent claim, claim 21, it is noted that the claim is directed to a module filter arranged for “inside-out” filtration flow, wherein the fluid to be filtered (the non-filtrate) flows into the interior chamber of the filter cell so that solids to be removed from the non-filtrate are deposited within the individual filter cells, and the filtrate passes to the exterior of the cells. Sicard et al. and Rahimi et al. are both directed to “outside-in” filtration flow, wherein the fluid to be filtered is passed from the exterior of the cell into the interior so that solids to be removed from the non-filtrate are deposited on the exterior surface of the filter cell, rather than deposited within the interior of the cells. Accordingly, it is respectfully submitted that one of ordinary skill in the art would not be led from the disclosures of Sicard et al. and Rahimi et al. to the claimed invention.

Furthermore, neither Sicard et al. nor Rahimi et al., whether taken individually or together, teach or suggest a module filter comprising, *inter alia*, a plurality of filter cells, each cell substantially comprising first and second filter material layers, each filter material layer

having an inner surface and an outer surface, the filter material layers having peripheral edges that are connected sealingly, and a support element in each filter cell, the support element spacing apart the inner surfaces of the filter material layers of each cell, the support element comprising a ring and having an outer diameter, wherein the peripheral edges of the filter material layers, which are connected sealingly, are spaced from the outer diameter of the support element to provide a hollow inner space. As described in the present application (*see, for example*, page 5, as well as Figures 2 and 8), the outer diameter of the support element is spaced from the peripheral edges of the filter material layers to provide the hollow inner space of the filter cell. Advantageously, this also provides open communication between the central channel of the module filter and the hollow inner space (page 6, lines 10-14).

There is no disclosure or suggestion in either Sicard et al. or Rahimi et al. of such filter cells and support elements. Sicard et al. merely teaches drainage cells **20** that extend throughout filter discs **18** (*see, for example*, Figure 1) in order to reinforce against collapse under pressure flow of fluid through the filter discs **18** (column 3, lines 14-18). The outer diameter of the drainage cell **20** contacts the peripheral edges of the filter discs **18** (*see, for example*, Figures 1 and 2) and no space is present between cell and peripheral edges, rather than forming a space between the outer diameter of the drainage cell **20** from the peripheral edges of the filter discs **18** to provide a hollow inner space. Moreover, there is no teaching in Sicard et al. that the peripheral edges of the filter discs **18** are connected sealingly.

Rahimi et al. also fails to teach or suggest such filter cells and support elements. Rahimi et al. merely teaches one or more filter elements **12** may include a hub **15**, which can be fitted around a perforated collection tube **16** (column 3, lines 30-33), and one or more passages **21** extend radially through the filter element **12** and the hub **15** (column 3, lines 43-45). There is no teaching or suggestion that the hub **15** is in a filter cell and spaces apart the inner surfaces of the filter element. Moreover, there is no disclosure in Rahimi et al. of filter material layers having peripheral edges that are connected sealingly.

Accordingly, there is no teaching or suggestion in Sicard et al. or Rahimi et al. alone, or in combination, of a plurality of filter cells, each cell substantially comprising first and second filter material layers, each filter material layer having an inner surface and an outer surface, the filter material layers having peripheral edges that are connected sealingly, and a support element in each filter cell, the support element spacing apart the inner surfaces of the filter material layers of each cell, the support element comprising a ring and having an outer diameter, wherein the peripheral edges of the filter material layers, which are connected

sealingly, are spaced from the outer diameter of the support element to provide a hollow inner space.

Furthermore, there is no suggestion in Sicard et al. and Rahimi et al. to improve upon the disclosed filter assemblies in the precise manner which yields the claimed invention. One of ordinary skill in the art would not have been motivated to modify the drainage support cells **20** of Sicard et al. to include the hub **15** of Rahimi et al. as set forth in the Office Action because such a modification would destroy the filter assembly of Sicard et al. The drainage support cell **20** of Sicard et al. is designed to extend throughout the filter disc **18** (*see, for example*, Figure 1) in order to provide support and reinforcement to the filter disc **18** (e.g., column 3, lines 14-18). Without the fully extended drainage support cell **20**, the filter would collapse under fluid pressure flow and the filter assembly would become inoperative.

Additionally, the combination of Sicard et al. and Rahimi et al. fails to suggest drainage support bodies “*that extend[] at least approximately over the entire outer surface of the filter material layers of the filter cells.*” Rahimi et al. discloses a spacer **22** spaced from the hub **15** and collection tube **16** (column 4, lines 60-64 and Figure 1), and thus, in view of the space between the space between the spacer and the hub and collection tube, the spacer **22** fails to extend at least approximately over the entire outer surface of the filter material layers.

In view of the lack of suggestion in Sicard et al. and Rahimi et al., the combination of Sicard et al. and Rahimi et al. relied upon to reject the present claims can only be made by utilizing the present invention as a guide and employing improper hindsight analysis. The law demands something quite different, namely a suggestion or motivation *in the prior art*, not the claimed invention itself, in order to properly rely upon a combination of references in rejecting the claims. *See, for example, In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).

Accordingly, it is respectfully submitted that there is neither Sicard et al. nor Rahimi et al., whether taken individually or in combination, would lead one of ordinary skill to the claimed invention.

Since independent claim 21 is allowable for the reasons set forth above, the dependent claims are allowable as they depend from the novel and non-obvious independent claims.

Moreover, with respect to the additional rejections of various dependent claims, the rejection of independent claim 21 in view of Sicard et al. and Rahimi et al. is defective for the reasons set forth above, and the teaching of the additional references (e.g., Trumpf et al., Robinson, Diemer et al. ‘042, Diemer et al. ‘041, and Fleck et al.) fail to remedy the deficiencies.

Additionally, with respect to, for example, the rejection of dependent claim 24, there is no teaching or suggestion in Sicard et al., Rahimi et al., or Trump et al., whether taken individually or together, of, for example, a module filter wherein "*drainage channels extend in the form of radial beams to a peripheral rim of said drainage support bodies.*" Trump et al. discloses a first plate **10** and a second plate **11** wherein radial intake spaces **13** and discharge spaces **14** are incorporated on the plates (column 4, lines 5-8). The intake spaces **13** of a first plate **10** and the discharge spaces **14** of a second plate **11** lie above one another so that the fluid can flow optimally through a filter fabric **17** (column 4, lines 8-11). One of ordinary skill in the art would not be led from Trump et al. to modify the openings **25** of the Rahimi et al. spacer **22** with intake spaces **13** or discharge spaces **14**. Moreover, the spacer **22** of Rahimi et al. has a corrugated body **23** (Figures 2 and 3) and is not designed as a plate which can incorporate channels that extend in the form of radial beams.

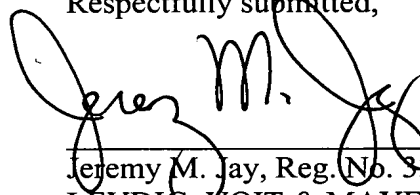
For the reasons set forth above, reconsideration of the rejections is respectfully requested.

Conclusion

In view of the amendment and remarks recited herein, the application is considered in good and proper form for allowance, and the Examiner is respectfully requested to pass this application to issue.

If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,



Jeremy M. Jay, Reg. No. 33,587
LEYDIS, VOIT & MAYER
700 Thirteenth Street, N.W., Suite 300
Washington, DC 20005-3960
(202) 737-6770 (telephone)
(202) 737-6776 (facsimile)

Date:

21 July 2004